

## Quarterly Report – Public Page

Date of Report: November 27, 2019

Contract Number: 693JK31810010

Prepared for: DOT/PHMSA

Project Title: Improved Tools to Locate Buried Pipe in Congested Undergrounds

Prepared by: Gas Technology Institute

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For 4<sup>th</sup> Quarter period ending: November 30, 2019

### Project Scope

The purpose of this project is to produce a field proven, market ready, obstacle location technology for use in horizontal directional drilling (HDD) applications. ORFEUS (Optimized Radar to Find Every Utility in the Street) is an effort aimed at developing a safe, cost effective “look-ahead” obstacle detection system for HDD equipment. The ORFEUS effort is conducted by a collaborative organization of multiple companies to develop a prototype that has been field tested, both in Europe and the US. This project seeks to further develop the technology to bring forward a commercially viable product for identifying obstacles in and around the path of a HDD drill rig; therefore, reducing third-party damage to underground utilities.

This project seeks to improve the ORFEUS obstacle detection technology by: making improvements to the bore head radar; software enhancements to improve the user interface; improvements in the communications to the drill head enabling the lengthening of the total drill length; perform system validations and market launch preparations; and conduct operational field tests.

### Technical Status

The project remains delayed due to continued contract negotiations with various subcontractors. The issues have been around the flow down terms and conditions from the prime contract. This is being resolved by having some of the smaller subcontractors be subs to Tracto-Technik. Tracto-Technik will take on the liabilities as the main subcontractor.

### Results and Conclusions:

No results to report on during the 5<sup>th</sup> quarter due to the ongoing contract negotiations.

### Plans for Future Activity:

During the next quarter, the following activities will be conducted:

- Complete the contract negotiations and execute all subcontracts
- Revisit the project scope of work with team members and work with PHMSA to determine updated project schedule
- Initiate development tasks.